

REMARKS

Claims 1, 3 – 8, 14, 16 and 17 are in the application. Claims 14 and 16 – 17 stand rejected under 35 U.S.C. 112, first paragraph. The Examiner states that the original disclosure fails to disclose the relation between the value of regenerative braking torque and pedal position. Applicants respectfully request that Examiner directs his attention to paragraphs 63, 68, 78 and 87 of the application, wherein this relationship is defined.

Claims 5 – 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to point out the subject matter of the invention. Specifically, the Examiner states that Claim 5 recites “the speed”. In this respect, Examiner’s attention is respectfully directed to paragraph 88 of the application as filed, wherein it is made clear that the vehicle speed is what is being claimed. Moreover, Claim 5 says “speed of said vehicle”.

Claims 1, 3 – 5, 14 and 16 stand rejected under 35 U.S.C. 102(b) as being anticipated by Taga et al (U.S. Pat 5,915,801). The Examiner states that Taga et al ‘801 disclose all the limitations of the instant claims including a braking system including an engine, a clutch, a transaxle assembly etc. Applicants respectfully traverse this rejection and request that each of Claims 1, 3 – 5, 14 and 16 be reconsidered in view of these remarks and in view of the previous amendment of Claims 1 and 14, and passed to issue.

Applicants respectfully submit that the Examiner’s reading of Taga et al ‘801 is in error. In this regard, the Examiner’s attention is directed to Taga et al ‘801, col 5, lines 4 – 23, wherein Taga et al ‘801 discloses and teaches that if the accelerator pedal is depressed, no regenerative braking is provided. This conclusion is abundantly clear when one reads from Taga et al ‘801 that “When it is judged that the accelerator pedal is depressed, the operation of the controller 24 leaves the routine shown in this drawing.” The “routine shown in this drawing” is regenerative braking to simulate engine compression braking. As amended, Claims 1 and 14 make clear that applicants’ engine is disconnected from the drive line during regenerative braking events, with the disconnection being based upon

accelerator pedal position. Moreover, the value of the regenerative braking torque is based at least in part upon the position of the pedal. In contrast, Taga et al '801 uses the rate of accelerator pedal movement, and in the event that the pedal is not depressed, produces no regenerative braking. As a result, Taga et al '801 cannot comprise a basis for valid rejection of Applicants' claims, in this case, Claims 1, 3 – 5, 14 and 16.

Claims 1, 3 – 4, 7 – 8, 14 and 16 – 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Phillips et al (U.S. Pat 6,543,565). Phillips et al '565 discloses an accelerator pedal in a control system for disengaging a clutch in a hybrid electric vehicle. However, Phillips et al '565 contains only the bald assertion that accelerator pedal position could be an "engine disconnect factor" (see Phillips et al '565 at col 3, lines 49 – 52. Phillips et al '565 neither teaches nor suggests that given a regenerative braking event, the clutch will be disconnected and the magnitude of compression braking will be based on the position of the accelerator pedal. As such, Claims 1 and 14 as amended, as well as the claims depending therefrom patentably defined over Phillips et al '565 and should be passed to issue. Such action is earnestly solicited.

Claims 6 – 8 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Taga et al '801 in view of Kidston et al (U.S. Pat 5,615,933). For his part, Kidston et al '933 teaches control of regenerative braking with a purely electric vehicle and teaches nothing regarding clutching and declutching of an engine based as a function of accelerator pedal position. Moreover, Kidston et al '933 does not and cannot remedy any of the teaching deficiencies noted with respect to Taga et al '801. Therefore, as a result, Claims 6 – 8 and 17, which depend respectively from Claims 1 and 14, are allowable over the combination of Kidston et al '933 and Taga et al '801 and should be passed to issue. Such action is earnestly solicited.

Regarding Claim 7, the Examiner states that Taga et al '801 discloses master cylinder pressure to control the regenerative and friction braking. However, the deficiency of Taga et al '801 in terms of this basic teaching have been noted and Claim 7 is therefor allowable.

The Examiner rejects Claims 8 and 17 over Taga et al '801 in view of Kidston et al '933. As noted above, because these claims depend from Claims 1 and 14 respectively, Claims 8 and 17 are therefore allowable and should be passed to issue. Such action is earnestly solicited.

Claims 5 and 6 stand rejected under 35 U.S.C. 103(a) as being obvious over Phillips et al '565 in view of Kidston et al '933. Applicants respectfully traverse this rejection and request that Claims 5 and 6 be reconsidered in view of these remarks and further in view of amendment of Claim 1, and passed to issue. Such action is earnestly solicited. The fact of the matter is that neither Phillips et al '565 nor Kidston et al '933 teach a regenerative braking system having functionality posited upon accelerator position as set forth in amended Claim 1, and Kidston et al '933 teaches nothing about declutching an engine for a hybrid electric vehicle to allow simulation engine compression braking.

In sum, each of the claims remaining in this case is believed to be in condition for allowance because none of the references cited by the Examiner, whether taken singly, or in combination with each other, either teach or suggest claimed invention in which regenerative braking torque is based upon accelerator position during a braking event, with the regenerative torque having a value based at least in part upon the position of the accelerator pedal. It is clear that all the art cited by the Examiner in the hybrid vehicle context is on/off with respect to application of braking torque in response to accelerator pedal position. For this reason, each of the claims in this case is believed to be in condition for allowance and should be passed to issue. Such action is earnestly solicited.

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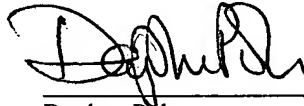
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